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DATE: Thursday, May 13, 2004

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<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L2	deformylase and crystal and aureus	19
<input type="checkbox"/>	L1	deformylase same crystal and aureus	3

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Search Results - Record(s) 1 through 3 of 3 returned.

1. Document ID: US 20040091856 A1

Using default format because multiple data bases are involved.

L1: Entry 1 of 3

File: PGPB

May 13, 2004

PGPUB-DOCUMENT-NUMBER: 20040091856

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040091856 A1

TITLE: DNA sequences from staphylococcus aureus bacteriophage 44AHJD that encode anti-microbial polypeptides

PUBLICATION-DATE: May 13, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Pelletier, Jerry	Baie-D'Urfe		CA	
Gros, Philippe	Lambert		CA	
Dubow, Michael	Montreal		CA	

US-CL-CURRENT: 435/6; 435/5[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Drawn D](#)

2. Document ID: US 20030170868 A1

L1: Entry 2 of 3

File: PGPB

Sep 11, 2003

PGPUB-DOCUMENT-NUMBER: 20030170868

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030170868 A1

TITLE: Crystallization and structure of Staphylococcus aureus peptide deformylase

PUBLICATION-DATE: September 11, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Baldwin, Eric T.	Portage	MI	US	
Harris, Melissa S.	Marshall	MI	US	

US-CL-CURRENT: 435/228; 702/19[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D.](#) 3. Document ID: US 6281245 B1

L1: Entry 3 of 3

File: USPT

Aug 28, 2001

US-PAT-NO: 6281245

DOCUMENT-IDENTIFIER: US 6281245 B1

TITLE: Methods for solid-phase synthesis of hydroxylamine compounds and derivatives, and combinatorial libraries thereof

DATE-ISSUED: August 28, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Patel; Dinesh V.	Fremont	CA		
Ngu; Khehyong	Lawrenceville	NJ		

US-CL-CURRENT: 514/575

ABSTRACT:

A novel method for generating hydroxylamine, hydroxamic acid, hydroxyurea, and hydroxylsulfonamide compounds is disclosed. The method involves the nucleophilic attack of an alkoxyamine on a suitable solid phase support. Techniques of combinatorial chemistry can then be applied to the immobilized alkoxyamine to generate a diverse set of compounds. Cleavage of the compounds from the support yields a library of hydroxylamine or hydroxylamine derivative compounds, which can be screened for biological activity (e.g., inhibition of metalloproteinases).

27 Claims, 34 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 34

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D.](#)[Clear](#) | [Generate Collection](#) | [Print](#) | [Fwd Refs](#) | [Bkwd Refs](#) | [Generate OACs](#)

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Search Results - Record(s) 1 through 19 of 19 returned.

1. Document ID: US 20040091856 A1

Using default format because multiple data bases are involved.

L2: Entry 1 of 19

File: PGPB

May 13, 2004

PGPUB-DOCUMENT-NUMBER: 20040091856

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040091856 A1

TITLE: DNA sequences from staphylococcus aureus bacteriophage 44AHJD that encode anti-microbial polypeptides

PUBLICATION-DATE: May 13, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Pelletier, Jerry	Baie-D'Urfe		CA	
Gros, Philippe	Lambert		CA	
Dubow, Michael	Montreal		CA	

US-CL-CURRENT: 435/6; 435/5

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RMD](#) | [Drawn D](#)

2. Document ID: US 20040029129 A1

L2: Entry 2 of 19

File: PGPB

Feb 12, 2004

PGPUB-DOCUMENT-NUMBER: 20040029129

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040029129 A1

TITLE: Identification of essential genes in microorganisms

PUBLICATION-DATE: February 12, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Wang, Liangsu	San Diego	CA	US	
Zamudio, Carlos	La Jolla	CA	US	
Malone, Cheryl	Santee	CA	US	

Haselbeck, Robert	San Diego	CA	US
Ohlsen, kari L.	San Diego	CA	US
Zyskind, Judith W.	La Jolla	CA	US
Wall, Daniel	San Diego	CA	US
Trawick, John D.	La Mesa	CA	US
Carr, Grant J.	Escondido	CA	US
Yamamoto, Robert	San Diego	CA	US
Forsyth, R. Allyn	San Diego	CA	US
Xu, H. Howard	San Diego	CA	US

US-CL-CURRENT: 435/6; 435/183, 435/252.33, 435/254.2, 435/320.1, 435/325, 435/419,
435/69.1, 530/350, 536/23.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KINIC](#) | [Drawn D](#)

3. Document ID: US 20030224379 A1

L2: Entry 3 of 19

File: PGPB

Dec 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030224379

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030224379 A1

TITLE: Novel nucleic acids and polypeptides

PUBLICATION-DATE: December 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Tang, Y. Tom	San Jose	CA	US	
Yang, Yonghong	San Jose	CA	US	
Wang, Zhiwei	Sunnyvale	CA	US	
Weng, Gezhi	Piedmont	CA	US	
Ma, Yunqing	Santa Clara	CA	US	

US-CL-CURRENT: 435/6; 435/183, 435/320.1, 435/325, 435/69.1, 530/350, 536/23.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KINIC](#) | [Drawn D](#)

4. Document ID: US 20030170868 A1

L2: Entry 4 of 19

File: PGPB

Sep 11, 2003

PGPUB-DOCUMENT-NUMBER: 20030170868

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030170868 A1

TITLE: Crystallization and structure of Staphylococcus aureus peptide deformylase

PUBLICATION-DATE: September 11, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Baldwin, Eric T.	Portage	MI	US	
Harris, Melissa S.	Marshall	MI	US	

US-CL-CURRENT: 435/228; 702/19

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Drawn D](#)

5. Document ID: US 20030130179 A1

L2: Entry 5 of 19

File: PGPB

Jul 10, 2003

PGPUB-DOCUMENT-NUMBER: 20030130179

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030130179 A1

TITLE: Methods for identifying therapeutic targets for treating infectious disease

PUBLICATION-DATE: July 10, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shepard, H. Michael	Encinitas	CA	US	
Lackey, David B.	San Diego	CA	US	
Cathers, Brian E.	San Diego	CA	US	
Sergeeva, Maria V.	San Diego	CA	US	

US-CL-CURRENT: 514/12; 435/5, 435/7.1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Drawn D](#)

6. Document ID: US 20030069223 A1

L2: Entry 6 of 19

File: PGPB

Apr 10, 2003

PGPUB-DOCUMENT-NUMBER: 20030069223

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030069223 A1

TITLE: Novel pyrrolidine bicyclic compounds and its derivatives, compositions and methods of use

PUBLICATION-DATE: April 10, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Jacobs, Jeffrey	San Mateo	CA	US	

Jain, Rakesh K.	Fremont	CA	US
Lewis, Jason G.	Hayward	CA	US
Patel, Dinesh V.	Fremont	CA	US
Yuan, Zhengyu	Fremont	CA	US

US-CL-CURRENT: 514/211.01, 514/210.17, 514/217.11, 514/227.5, 514/317, 514/365,
514/423, 540/544, 540/607, 544/59, 546/226, 548/200, 548/530, 548/950

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RMD](#) | [Drawn D.](#)

7. Document ID: US 20020165167 A1

L2: Entry 7 of 19

File: PGPB

Nov 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020165167
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020165167 A1

TITLE: Antibacterial agents

PUBLICATION-DATE: November 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hunter, Michael George	Cowley		GB	
Beckett, Raymond Paul	Cowley		GB	
Clements, John Martin	Cowley		GB	
Whittaker, Mark	Cowley		GB	
Davies, Stephen John	Cowley		GB	
Pratt, Lisa Marie	Cowley		GB	
Spavold, Zoe Marie	Cowley		GB	
Launchbury, Steven	Cowley		GB	

US-CL-CURRENT: 514/19, 514/400, 514/419, 514/575, 548/338.1, 548/496, 562/621

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RMD](#) | [Drawn D.](#)

8. Document ID: US 20020119962 A1

L2: Entry 8 of 19

File: PGPB

Aug 29, 2002

PGPUB-DOCUMENT-NUMBER: 20020119962
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020119962 A1

TITLE: Novel urea compounds, compositions and methods of use and preparation

PUBLICATION-DATE: August 29, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Jacobs, Jeffrey W.	San Mateo	CA	US	
Patel, Dinesh	Fremont	CA	US	
Lewis, Jason	Hayward	CA	US	
Ni, Zhi-Jie	Fremont	CA	US	

US-CL-CURRENT: 514/210.17; 514/210.18, 514/211.01, 514/211.15, 514/217.03,
514/217.11, 514/227.5, 514/227.8, 514/231.5, 514/237.5, 514/252.13, 514/255.01,
514/326, 514/330, 514/365, 514/374, 514/385, 514/423

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Drawn By](#)

9. Document ID: US 6720139 B1

L2: Entry 9 of 19

File: USPT

Apr 13, 2004

US-PAT-NO: 6720139

DOCUMENT-IDENTIFIER: US 6720139 B1

TITLE: Genes identified as required for proliferation in Escherichia coli

DATE-ISSUED: April 13, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Zyskind; Judith	La Jolla	CA		
Ohlsen; Kari L.	San Diego	CA		
Trawick; John	La Mesa	CA		
Forsyth; R. Allyn	San Diego	CA		
Froelich; Jamie M.	San Diego	CA		
Carr; Grant J.	Escondido	CA		
Yamamoto; Robert T.	San Diego	CA		
Xu; H. Howard	San Diego	CA		

US-CL-CURRENT: 435/6; 435/4, 514/2, 514/44

ABSTRACT:

The sequences of nucleic acids encoding proteins required for E. coli proliferation are disclosed. The nucleic acids can be used to express proteins or portions thereof, to obtain antibodies capable of specifically binding to the expressed proteins, and to use those expressed proteins as a screen to isolate candidate molecules for rational drug discovery programs. The nucleic acids can also be used to screen for homologous genes that are required for proliferation in microorganisms other than E. coli. The nucleic acids can also be used to design expression vectors and secretion vectors. The nucleic acids of the present invention can also be used in various assay systems to screen for proliferation required genes in other organisms as well as to screen for antimicrobial agents.

49 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KWMC](#) | [Drawn](#)

10. Document ID: US 6716878 B1

L2: Entry 10 of 19

File: USPT

Apr 6, 2004

US-PAT-NO: 6716878

DOCUMENT-IDENTIFIER: US 6716878 B1

TITLE: Antimicrobial agents

DATE-ISSUED: April 6, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Todd; Richard Simon	Oxford			GB
Brookings; Daniel Christopher	Oxford			GB
Smith; Helen Katherine	Oxford			GB
Thompson; Alison Jane	Oxford			GB
Beckett; Raymond Paul	Oxford			GB

US-CL-CURRENT: 514/575; 514/645, 562/621, 562/622, 562/623, 564/300

ABSTRACT:

Compounds of formula (I) are antibacterial agents: ##STR1##

wherein Z represents a radical of formula --N(OH)CH(.dbd.O) or of formula --C (.dbd.O)NH(OH), and R_{sub.1} -R_{sub.4} are as defined in the specification. A method for the treatment of bacterial or protozoal infections in humans and non-human mammals, which comprises administering to a subject suffering such infection an antibacterially or antiprotozoally effective dose of a compound of formula (I) or a pharmaceutically or veterinarilly acceptable salt, hydrate or solvate thereof.

24 Claims, 0 Drawing figures

Exemplary Claim Number: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KWMC](#) | [Drawn](#)

11. Document ID: US 6589738 B1

L2: Entry 11 of 19

File: USPT

Jul 8, 2003

US-PAT-NO: 6589738

DOCUMENT-IDENTIFIER: US 6589738 B1

TITLE: Genes essential for microbial proliferation and antisense thereto

DATE-ISSUED: July 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Forsyth; R. Allyn	San Diego	CA		
Ohlsen; Kari	San Diego	CA		
Zyskind; Judith W.	La Jolla	CA		

US-CL-CURRENT: 435/6; 435/5, 435/91.1, 435/91.2, 530/350, 536/23.1, 536/24.3,
536/24.31, 536/24.33, 536/24.5

ABSTRACT:

The sequences of nucleic acids encoding proteins required for E. Coli proliferation are disclosed. The nucleic acids can be used to express proteins or portions thereof, to obtain antibodies capable of specifically binding to the expressed proteins, and to use those expressed proteins as a screen to isolate candidate molecules for rational drug discovery programs. The nucleic acids can also be used to screen for homologous genes that are required for proliferation in microorganisms other than E. Coli. The nucleic acids can also be used to design expression vectors and secretion vectors. The nucleic acids of the present invention can also be used in various assay systems to screen for proliferation required genes in other organisms as well as to screen for antimicrobial agents.

12 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Print](#) | [Claims](#) | [RWMIC](#) | [Drawn De](#)

12. Document ID: US 6545051 B1

L2: Entry 12 of 19

File: USPT

Apr 8, 2003

US-PAT-NO: 6545051

DOCUMENT-IDENTIFIER: US 6545051 B1

TITLE: Antibacterial hydroxamic acid derivatives

DATE-ISSUED: April 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hunter; Michael George	Oxford			GB
Beckett; Raymond Paul	Oxford			GB
Clements; John Martin	Oxford			GB
Whittaker; Mark	Oxford			GB

US-CL-CURRENT: 514/575

ABSTRACT:

A method for the treatment of bacterial infections in humans and non-human mammals, which comprises administering to a subject suffering such infection an

antibacterial effective dose of a compound of formula (I): ##STR1##

wherein R.sub.1 represents hydrogen, hydroxy, amino, methyl, or trifluoromethyl; R.sub.2 represents a group R.sub.10 --(X).sub.n --(ALK) -- wherein R.sub.10 represents hydrogen, a C.sub.1 -C.sub.6 alkyl, C.sub.2 -C.sub.6 alkenyl, C.sub.2 -C.sub.6 alkynyl, cycloalkyl, aryl, or heterocyclyl group, ALK represents a straight or branched divalent C.sub.1 -C.sub.6 alkylene, C.sub.2 -C.sub.6 alkenylene, C.sub.2 -C.sub.6 alkynylene radical, and may be interrupted by one or more non-adjacent --NH--, --O-- or --S-- linkages; X represents --NH--, --O-- or --S--, and n is 0 or 1; R represents hydrogen or C.sub.1-C.sub.6 alkyl; R.sub.3 represents the characterising group of a natural or non-natural .alpha. amino acid in which any functional groups may be protected; and R.sub.4 represents an ester or thioester group.

14 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Drawn
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13. Document ID: US 6503897 B1

L2: Entry 13 of 19

File: USPT

Jan 7, 2003

US-PAT-NO: 6503897

DOCUMENT-IDENTIFIER: US 6503897 B1

**** See image for Certificate of Correction ****

TITLE: Antibacterial agents

DATE-ISSUED: January 7, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Beckett; Raymond Paul	Oxford			GB
Whittaker; Mark	Oxford			GB
Spavold; Zoe Marie	Oxford			GB

US-CL-CURRENT: 514/183; 514/211.03, 514/211.07, 514/212.03, 514/218, 514/327,
514/431, 540/460, 540/463, 540/488, 540/491, 540/492, 540/527, 546/221, 549/10

ABSTRACT:

Compounds of formula (I) are antibacterial agents wherein: R.sub.3 and R.sub.4, taken together with the carbon atoms to which they are respectively attached, form an optionally substituted saturated carbocyclic or heterocyclic ring of 5 to 16 atoms, which may be benz-fused or fused to a second optionally substituted saturated carbocyclic or heterocyclic ring of 5 to 16 atoms; and R.sub.1 and R.sub.2 are as defined in the specification. ##STR1##

9 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Drawing

14. Document ID: US 6476067 B1

L2: Entry 14 of 19

File: USPT

Nov 5, 2002

US-PAT-NO: 6476067

DOCUMENT-IDENTIFIER: US 6476067 B1

TITLE: N-formyl hydroxylamine derivatives as antibacterial agents

DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hunter; Michael George	Oxford			GB
Beckett; Raymond Paul	Oxford			GB
Clements; Martin John	Oxford			GB
Whittaker; Mark	Oxford			GB

US-CL-CURRENT: 514/490; 514/327

ABSTRACT:

Compounds of formula (I) are in the preparation of antibacterial agents, wherein: R.₁ represents hydrogen, C.₁-C.₆ alkyl or C.₁-C.₆ alkyl substituted by one or more halogen atoms; R.₂ represents a group R.₁₀(X)_n--(ALK)-- wherein R.₁₀ represents hydrogen, a C.₁-C.₆ alkyl, C.₂-C.₆ alkenyl, C.₁-C.₆ alkynyl, cycloalkyl, aryl, or heterocyclyl group, any of which may be unsubstituted or substituted by (C.₁-C.₆)alkyl, (C.₁-C.₆)alkoxy, hydroxy, mercapto, (C.₁-C.₆)alkylthio, amino, halo, trifluoromethyl, cyano, nitro, --COOH, --CONH₂, --COOR_A, --NHCOR_A, --CONHR_A, --NHR_A, --NR_AR_B, or --CONR_AR_B wherein R_A and R_B are independently a (C.₁-C.₆)alkyl group, and ALK represents a straight or branched divalent C.₁-C.₆ alkylene, C.₂-C.₆ alkenylene, or C.₂-C.₆ alkynylene radical, which may be interrupted by one or more non-adjacent --NH--, --O-- or --S-- linkages, X represents --NH--, --O-- or --S--, and n is 0 or 1, R represents hydrogen or C.₁-C.₆ alkyl, R.₃ represents the characterising group or a natural or non-natural alpha. amino acid in which any functional groups may be protected; and R.₄ represents an ester or thioester group.

15 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Drawing

15. Document ID: US 6423690 B1

L2: Entry 15 of 19

File: USPT

Jul 23, 2002

US-PAT-NO: 6423690

DOCUMENT-IDENTIFIER: US 6423690 B1

TITLE: Antibacterial agents

DATE-ISSUED: July 23, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hunter; Michael George	Oxford			GB
Beckett; Raymond Paul	Oxford			GB
Clements; John Martin	Oxford			GB
Whittaker; Mark	Oxford			GB
Davies; Stephen John	Oxford			GB
Pratt; Lisa Marie	Oxford			GB
Spavold; Zoe Marie	Oxford			GB
Launchbury; Steven	Oxford			GB

US-CL-CURRENT: 514/19; 514/211.01, 514/222.2, 514/228.8, 514/315, 514/365, 514/372,
514/374, 514/378, 514/645

ABSTRACT:

A method for the treatment of bacterial infections in humans and non-human mammals, which comprises administering to a subject suffering such infection an antibacterially effective dose of a compound of formula (I) or a pharmaceutically or veterinarilly acceptable salt thereof: ##STR1##

wherein: R.sub.1 represents hydrogen, or C.sub.1 -C.sub.6 alkyl or C.sub.1 -C.sub.6 alkyl substituted by one or more halogen atoms; R.sub.2 represents a group R.sub.10 --(X).sub.n --(ALK).sub.m -- wherein R.sub.10 represents hydrogen, or a C.sub.1 -C.sub.6 alkyl, C.sub.2 -C.sub.6 alkenyl, C.sub.2 -C.sub.6 alkynyl, cycloalkyl, aryl, or heterocyclyl group, any of which may be unsubstituted or substituted by (C.sub.1 -C.sub.6)alkyl, (C.sub.1 -C.sub.6)alkoxy, hydroxy, mercapto, (C.sub.1 -C.sub.6)alkylthio, amino, halo (including fluoro, chloro, bromo and iodo), trifluoromethyl, cyano, nitro, --COOH, --CONH.sup.2, --COOR.sup.1, --NHCOR.sup.1, --CONHR.sup.1, NHR.sup.1, --NR.sup.1 R.sup.2, or --CONR.sup.1 R.sup.2 wherein R.sup.1 and R.sup.2 are independently a (C.sub.1 -C.sub.6)alkyl group, and ALK represents a straight or branched divalent C.sub.1 -C.sub.6 alkylene, C.sub.2 -C.sub.6 alkenylene, or C.sub.2 -C.sub.6 alkynylene radical, and may be interrupted by one or more non-adjacent --NH--, --O-- or --S--linkages, X represents --NH--, --O-- or --S--, and m and n are independently 0 or 1; and A represents a group as defined in the specification.

36 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMPC	Drawn D.
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16. Document ID: US 6281245 B1

L2: Entry 16 of 19

File: USPT

Aug 28, 2001

US-PAT-NO: 6281245
DOCUMENT-IDENTIFIER: US 6281245 B1

TITLE: Methods for solid-phase synthesis of hydroxylamine compounds and derivatives, and combinatorial libraries thereof

DATE-ISSUED: August 28, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Patel; Dinesh V.	Fremont	CA		
Ngu; Khehyong	Lawrenceville	NJ		

US-CL-CURRENT: 514/575

ABSTRACT:

A novel method for generating hydroxylamine, hydroxamic acid, hydroxyurea, and hydroxysulfonamide compounds is disclosed. The method involves the nucleophilic attack of an alkoxyamine on a suitable solid phase support. Techniques of combinatorial chemistry can then be applied to the immobilized alkoxyamine to generate a diverse set of compounds. Cleavage of the compounds from the support yields a library of hydroxylamine or hydroxylamine derivative compounds, which can be screened for biological activity (e.g., inhibition of metalloproteinases).

27 Claims, 34 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 34

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Print](#) | [Claims](#) | [KOMC](#) | [Drawn](#)

17. Document ID: KR 2003095890 A

L2: Entry 17 of 19

File: DWPI

Dec 24, 2003

DERWENT-ACC-NO: 2004-291972

DERWENT-WEEK: 200427

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TITLE: Crystalline Staphylococcus aureus deformylase, useful in the development of antibiotics

INVENTOR: CHO, J M; HWANG, G Y ; JUN, Y H ; KIM, J H ; LEE, T G ; NOH, S G

PRIORITY-DATA: 2002KR-0033502 (June 15, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>KR 2003095890 A</u>	December 24, 2003		001	C12N009/48

INT-CL (IPC): C12 N 9/48

ABSTRACTED-PUB-NO: KR2003095890A
 BASIC-ABSTRACT:

NOVELTY - Crystalline Staphylococcus aureus deformylase, is new.

DETAILED DESCRIPTION - AN INDEPENDENT CLAIM is included for a method to prepare crystalline Staphylococcus aureus deformylase

USE - The deformylase is an important target protein for development of resistant antibiotics, and the crystalline deformylase can be easily X-ray analyzed and has improved degree of crystallinity.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	IPC	Detailed D
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18. Document ID: AU 2002364783 A1, WO 2003044185 A2

L2: Entry 18 of 19

File: DWPI

Jun 10, 2003

DERWENT-ACC-NO: 2003-513596

DERWENT-WEEK: 200419

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TITLE: New crystallized recombinant polypeptides from Staphylococcus aureus, Streptococcus pneumoniae, Helicobacter pylori or Pseudomonas aeruginosa involved in general metabolism, useful as drug targets for pathogenic bacteria

INVENTOR: ALAM, M Z ; AWREY, D ; BEATTIE, B ; CANADIEN, V ; DHARAMSI, A ; DOMAGALA, M ; EDWARDS, A ; HOUSTON, S ; MANSOURY, K ; NECAKOV, S ; NETHERY, K ; NG, I ; PINDER, B ; SHELDRICK, B ; VALLEE, F ; VEDADI, M ; WREZEL, O

PRIORITY-DATA: 2001US-343679P (December 28, 2001), 2001US-332160P (November 21, 2001), 2001US-333661P (November 27, 2001), 2001US-333665P (November 27, 2001), 2001US-341770P (December 18, 2001), 2001US-341954P (December 19, 2001), 2001US-342003P (December 19, 2001), 2001US-342542P (December 20, 2001), 2001US-344252P (December 21, 2001), 2001US-343570P (December 28, 2001), 2001US-343606P (December 28, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 2002364783 A1	June 10, 2003		000	C12N009/04
WO 2003044185 A2	May 30, 2003	E	277	C12N009/04

INT-CL (IPC): C07 K 1/30; C07 K 1/300; C07 K 14/205; C07 K 14/2055; C07 K 14/21; C07 K 14/211; C07 K 14/31; C07 K 14/311 ; C07 K 14/315; C07 K 14/3155; C07 K 17/02; C07 K 17/022; C07 K 19/00; C07 K 19/000; C07 K 103:00; C12 N 1/21; C12 N 1/211; C12 N 9/04; C12 N 9/10; C12 N 9/100; C12 N 9/80; C12 N 9/800; C12 N 11/02; C12 N 11/022; C12 Q 1/26; C12 Q 1/266

ABSTRACTED-PUB-NO: WO2003044185A

BASIC-ABSTRACT:

NOVELTY - A crystallized recombinant polypeptide (I) comprising the sequence of polypeptides from Staphylococcus aureus, Streptococcus pneumoniae, Helicobacter pylori, Escherichia coli and Pseudomonas aeruginosa which are involved in general metabolism, or a sequence having at least 95% identity with the polypeptide

sequence, where the polypeptide is in crystal form, is new.

DETAILED DESCRIPTION - A crystallized recombinant polypeptide (I) comprises the amino acid sequence (S) of polypeptides involved in general metabolism, which comprises:

- (a) shikimate dehydrogenase (aroE) or protein chain elongation factor EF-Ts (tsf) from *S. aureus*;
- (b) GroEL (mopA) from *H. pylori*;
- (c) peptide deformylase (def), peptide chain release factor 1 (prfA), DnaK protein (heat shock protein (hsp) 70) (dnaK), or protein chain elongation factor EF-Tu (tufB) from *P. aeruginosa*;
- (d) 3-phosphoshikimate 1-carboxyvinyltransferase (aroA), ribosome recycling factor (frr) or translation elongation factor P (efp) from *S. pneumoniae*; or
- (e) DnaK protein (hsp 70) (dnaK) from *E. coli*, where the amino acid sequences are fully given in the specification.

(I) comprises an amino acid sequence having at least 95% identity with the amino acid sequence of the above polypeptide, or comprises an amino acid sequence encoded by a polynucleotide that hybridizes under stringent conditions to the complementary strand of a polynucleotide having a sequence encoding any of the above polypeptides. (I) is in a crystal form.

INDEPENDENT CLAIMS are also included for:

- (1) a sample (II) comprising an isolated, recombinant polypeptide (P), comprising (S), an amino acid sequence having at least 95% identity with (S), or an amino acid sequence encoded by a polynucleotide that hybridizes under stringent conditions to the complementary strand of a polynucleotide having a sequence encoding (S), where (P) is labeled with a heavy atom, or is enriched in nuclear magnetic resonance (NMR) isotope;
- (2) a crystallized complex comprising (I) and a co-factor or a small organic molecule, where the complex is in a crystal form;
- (3) an isolated, recombinant polypeptide comprising an amino acid sequence having at least 90% identity with GroEL polypeptide from *H. pylori*, peptide deformylase from *P. aeruginosa*, 3-phosphoshikimate 1-carboxyvinyltransferase or ribosome recycling factor from *S. pneumoniae*, peptide chain release factor 1 from *P. aeruginosa*, or an amino acid sequence encoded by a polynucleotide that hybridizes under stringent conditions to the complementary strand of a polynucleotide encoding the above mentioned polypeptides, where the GroEL polypeptide comprises the amino acids residue K at position 58, T at position 307 and D at position 340, peptide deformylase comprises E at position 85, 3-phosphoshikimate 1-carboxyvinyltransferase comprises V at position 250 and C at position 307, ribosome recycling factor comprises L at position 88 and Q at position 142, and peptide chain release factor 1 comprises L at position 48, E at position 51 and V at position 304;
- (4) a composition (III) comprising (P), where (P) is at least about 90% pure in a sample of (III);
- (5) a complex comprising an isolated, recombinant polypeptide comprising:
 - (a) a sequence of peptide deformylase and DnaK protein (gi/9951024);

- (b) a sequence of ribosome recycling factor and DNA ligase, NAD-dependent (gi/14972593);
- (c) a sequence of translation elongation factor P and ribosomal protein L1 (gi/14972107);
- (d) a sequence of DnaK protein from *P. aeruginosa* and hsp GrpE (gi/9951026);
- (e) a sequence of protein chain elongation factor EF-Tu and 50S ribosomal protein L13 (gi/9950666), 30S ribosomal protein S3 (gi/9950474), 30S ribosomal protein S2 (gi/9949817), elongation factor Ts (gi/9949816), or DnaK protein (gi/9951024); or
- (f) a sequence of protein chain elongation factor EF-Ts and translational elongation factor TU (gi/13700439) or 80 kDa unidentified protein; and

(6) a host cell comprising a nucleic acid encoding (P), where the culture of the host cell produces 1 mg of the polypeptide/l of culture and the polypeptide is at least one-third soluble as measured by gel electrophoresis.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine; Modulator of (P).

No biological data given.

USE - (I) is useful for designing a modulator for the prevention or treatment of *S. aureus*, *H. pylori*, *P. aeruginosa*, *S. pneumoniae* or *E. coli* related disease or disorder. The method comprises providing a three-dimensional (3D) structure for (I), identifying a potential modulator by reference to the 3D structure, contacting the potential modulator with the recombinant polypeptide and assaying the activity of the polypeptide or determining the viability of *S. aureus*, *H. pylori*, *P. aeruginosa*, *S. pneumoniae* or *E. coli* after contact with the modulator, where a change in the activity of the polypeptide or the viability of the bacteria indicates that the modulator may be useful for preventing or treating the disease or disorder. (P) is also useful for identifying small molecules that bind to (P). The method comprises generating a first NMR spectrum of (P) which is isotopically labeled, exposing (P) to one or more small molecules, generating a second NMR spectrum of (P) which has been exposed to one or more small molecules, and comparing the first and second spectra to determine differences between the spectra, where the difference indicates one or more small molecules that have bound to (P) (claimed).

The structural and functional information of (I) aid in the discovery and design of therapeutic and diagnostic molecules. The crystal structure is useful to make a structural or computer model of the polypeptide, complex or its portion. (I) is also useful for determining crystal structure of a homolog of (P). A protein complex comprising (P) is useful for identifying modulators of the protein complex. Detecting the presence of (P) is useful for diagnosing a patient suffering from a disease or disorder of a pathogenic species. The diagnostic assays are useful for monitoring the effectiveness of an anti-pathogenic treatment in an individual suffering from a disease or disorder of such pathogen. (I) and the recombinant polypeptides are useful for inducing an immunological response in an individual and as an antigen for vaccination of a host to produce specific antibodies which protect against invasion of bacteria, for e.g. by blocking adherence of bacteria to damaged tissue. The polypeptides are also useful for developing antimicrobial agents which are useful as surface disinfectants, topical pharmaceuticals, personal hygiene applications, additive to cell culture medium and systemic pharmaceutical products, and as food preservative or in treating food products to eliminate potential pathogens.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Drawn
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19. Document ID: WO 200202758 A2, AU 200171647 A

L2: Entry 19 of 19

File: DWPI

Jan 10, 2002

DERWENT-ACC-NO: 2002-148012

DERWENT-WEEK: 200375

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TITLE: Crystalline Staphylococcus aureus peptide deformylase useful for solving structures of other molecules or molecular complexes, and designing modifiers of peptide deformylase activity

INVENTOR: BALDWIN, E T; HARRIS, M S

PRIORITY-DATA: 2000US-215550P (June 30, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>WO 200202758 A2</u>	January 10, 2002	E	149	C12N009/00
<u>AU 200171647 A</u>	January 14, 2002		000	C12N009/00

INT-CL (IPC): C12 N 9/00

ABSTRACTED-PUB-NO: WO 200202758A

BASIC-ABSTRACT:

NOVELTY - Crystalline Staphylococcus aureus peptide deformylase (Ia), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a molecule or molecular complex (II) comprising at least a portion of S.aureus peptide deformylase (Ia) or the deformylase-like active site, comprising:

(a) amino acids G58, G60, L61, Q65, E109, G110, C111, L112, I150, H154, E155 and H158, defined by a set of points having a root mean square deviation (RSD) of less than about 0.35 Angstrom from points representing backbone atoms (BA) of amino acids represented by structure coordinates given in the specification; or

(b) amino acids R56, S57, G58, V59, G60, L61, Q65, L105, P106, P107, G108, E109, G110, C111, L112, N117, Y147, I150, V151, H154, E155 and H158, defined by a set of points having RSD of less than about 0.8 Angstrom from points representing BA;

(2) a molecule or molecular complex (IIa) that is structurally homologous to (II);

(3) a scalable three-dimensional configuration of points (III), all or at least a portion of the points derived from structure coordinates of all or at least a portion of (II) or (IIa), and having RSD of less than about 1.4 Angstrom from structure co-ordinates;

(4) a machine-readable data storage medium (IV), comprising:

(a) a data storage material encoded with machine-readable data which, when using a machine programmed with instructions for using the data, is capable of displaying a

graphical three-dimensional representation of (II) or (IIa); or

(b) a data storage material encoded with a first set (S1) of machine-readable data which, when combined with a second set (S2) of machine-readable data, using a machine programmed with instructions for using S1 and S2, determines at least a portion of the structure co-ordinates corresponding to S2, where S1 comprises a Fourier transform of at least a portion of the structure coordinates of (Ia), and S2 comprises an X-ray diffraction pattern of a molecule/complex of unknown structure;

(5) computer-assisted methods for obtaining structural information about a molecule or a molecular complex of unknown structure, and for homology modeling an *S.aureus* peptide deformylase homolog;

(6) a potential modifier (V) of activity of (Ia) identified or designed using (Ia);

(7) a composition (VI) comprising (V);

(8) a pharmaceutical composition (PC) comprising (V), or its salt; and

(9) crystallizing (M3) an *S.aureus* peptide deformylase molecule or molecular complex, by preparing a stock solution of (II) at a concentration of 1-50 mg/ml, contacting the stock solution with a precipitation solution, and allowing (Ia/II) to crystallize from the resulting solution.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - *S.aureus* peptide deformylase modulator (claimed). No biodata is provided in the source material.

USE - (II) in combination with a computer-assisted method is useful for identifying, designing and making a potential modifier of *S.aureus* peptide deformylase activity (claimed). (I) is useful for solving the structures of other molecules or molecular complexes, designing modifiers of peptide deformylase activity, and in drug discovery. (V) is useful for blocking bacterial growth.

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Terms	Documents
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